ABSTRACT OF THE DISCLOSURE

The fuel reforming apparatus according to the present invention comprises a reforming unit having a reforming catalyst for steam-reforming a raw material of a hydrocarbon and a heater for heating the reforming unit to generate a hydrogen gas by heating the reforming unit while supplying the raw material and water to the heated reforming unit. This fuel reforming apparatus can recover the activity of the reforming catalyst by heating the reforming catalyst in a reducing atmosphere and, therefore, the present invention eliminates the need for replacing the poisoned reforming catalyst and makes it possible to recover with ease the decreased activity of the reforming catalyst.